

- collect HW/ Honor's problem
- 7.2 notes (short)
- Tests/corrections

7-2 Graphing Polynomial Functions

$$f(x) = x^4 + x^3 - 4x^2 - 4x$$



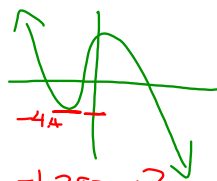
Roots $\{-2, -1, 0, 2\}$

Relative max $\{.941\}$
(1)

Relative min $\{-1.383, -6.914\}$
(2)

Ex

$$f(x) = -x^3 - 4x^2 + 5$$



Roots $\{ -3.618, -1.382, 1 \}$
(3)

Relative max 5
(1)

Relative min -4.481
(1)

Ex

$$f(x) = x^4 - x^3 - 4x^2 + 1$$

Roots

Relative max

Relative min

Do


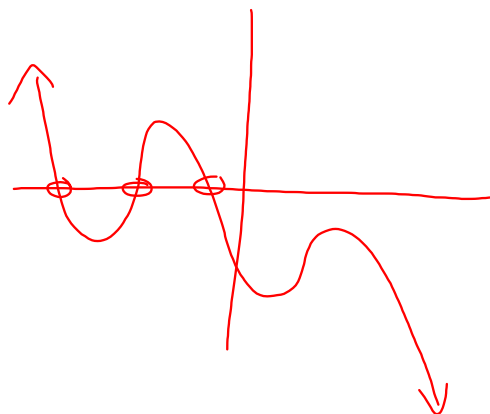
1. $f(x) = x^3 - 4x^2 + 5$

2. $f(x) = x^5 - 3x^4 - x^2 + 2$

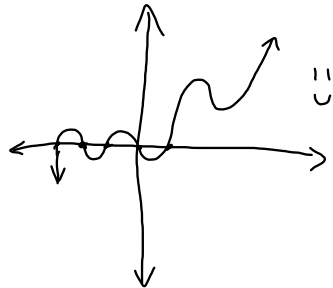
Degree n Turning points at most $n - 1$

degree 6
 + leading coeff. 6 R zeros

degree 5
 - leading coeff. 3 Real zeros

degree 7
 + L.C.
 5 R zeros



Real World Models

p359

HW
p356-358
15-21odd
27-30
36-38